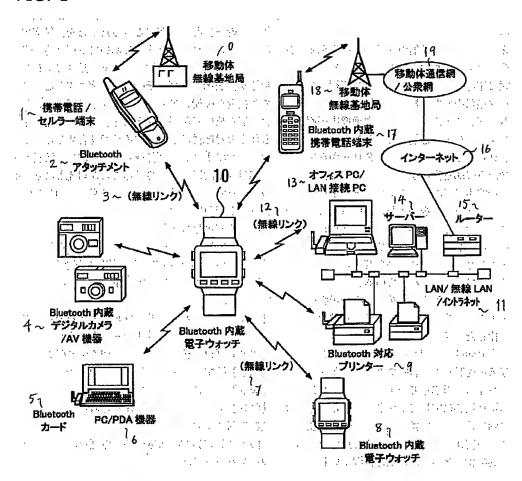
#### FP04203-IDS (JP2003-295994)

Japanese Unexamined Patent Application Publication No. 2003-295994

#### **DRAWINGS**

FIG. 1



- 0: Mobile wireless base station
- 1: Mobile phone/cellular terminal
- 2: Bluetooth attachment
- 3: (wireless link)
- 4: Digital camera/AV appliance with built-in Bluetooth
- 5: Bluetooth card
- 6: PC/PDA appliance

7: (wireless link)

8: Electronic watch with built-in Bluetooth

9: Bluetooth-compatible printer

10: Electronic watch with built-in Bluetooth

11: LAN/wireless LAN/intranet

12: (wireless link)

13: Office PC/LAN connected PC

14: Server

15: Router

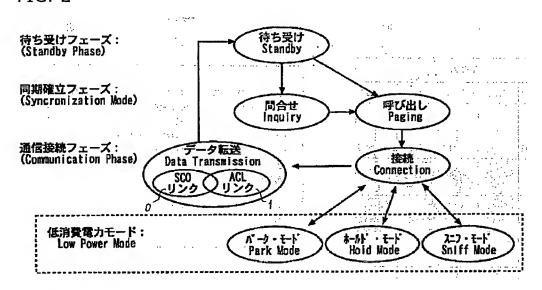
16: Internet

17: Mobile phone terminal with built-in Bluetooth

18: Mobile wireless base station

19: Mobile communication network/public network

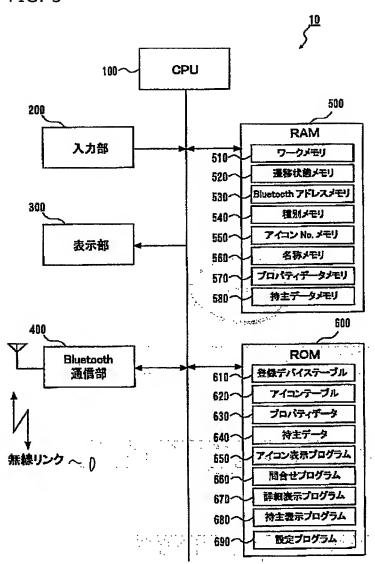
FIG. 2



0: Link

1: Link

FIG. 3



0: Wireless link

200: Input unit

300: Display unit

400: Bluetooth communication unit

510: Work memory

520: Transition state memory

530: Bluetooth address memory

540: Type memory

550: Icon No. memory

560: Name memory

570: Property data memory

580: Owner data memory

610: Registered device table

620: Icon table

630: Property data

640: Owner data

650: Icon display program

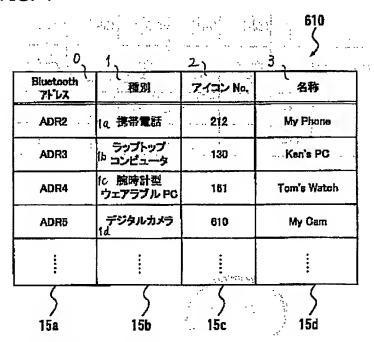
660: Inquiry program

670: Detailed display program

680: Owner display program

690: Settings program

FIG. 4



0: Bluetooth address

1: Type

1a: Mobile phone

1b: Laptop computer

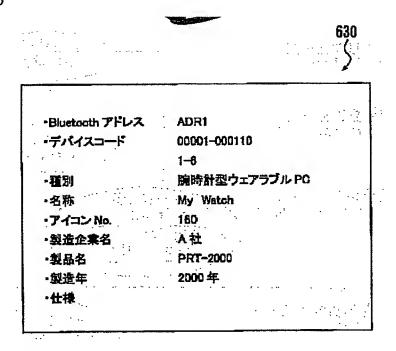
1c: Wristwatch-type wearable PC

1d: Digital camera

2: Icon No.

3: Name

## FIG. 6



## From the top

Bluetooth address

Device code

Type Wristwatch-type wearable PC

Name

Icon No.

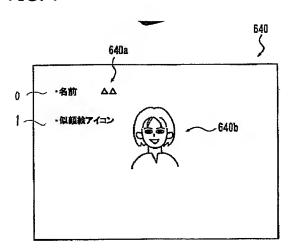
Manufacturing company Company A

Product name

Year of Manufacture Year 2000

Specification

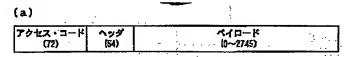
FIG. 7



0: Name

1: Face icon

FIG. 8(a)



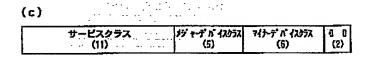
- (72) Access code
- (54) Header
- $(0\sim2745)$  Payload

FIG. 8(b)



(24) Device class

FIG. 8(c)



- (11) Service class
- (12) Major device class
- (13) Minor device class

#### FIG. 9(a)

| (a) 0,   | 1,   |
|----------|--|
| ヒット番号(   | サービスクラス内容  |
| 13<br>14 | 制限ディスカイブルモード   |
| 15       | (予約)   |
| 16<br>17 | (予約)<br>  ネットワーク系(LAN、アドホックなど)                                 |
| 18 19    | 出力装置系(ブリンタ、スピーカなど)<br>  入力装置系(スキャナ、マイクなど)                      |
| 20       | オブジェクト遊復系(V-Inbox、V-Folderなど)<br>オーディオ系〈スピーカ、マイク、ヘッドセットサービスなど) |
| 21<br>22 | 電話系(コードレス電話、モデム、ヘッドセットサービスなど)                                  |
| 23       | インフォメーション系(WEB サーバ、WAP サーバなど)                                  |

0: Hit number

1: Contents of service class

13: Limit discoverable mode

14: (Reservation)

15: (Reservation)

16: (Reservation)

17: Network system (e.g. LAN, ad hoc)

18: Output device system (e.g. printer, speaker)

19: Input device system (e.g. scanner, microphone)

20: Object transmission system (e.g. V-Inbox, V-Folder)

21: Audio system (e.g. speaker, microphone, head set service)

22: Telephone system (e.g. cordless telephone, modem, head set service)

23: Information system (e.g. WEB server, WAP server)

# FIG. 9(b)

| (b)   |    | 2,  |   |    | 3 1                              |
|-------|----|-----|---|----|----------------------------------|
| 設定ビット |    |     |   | 1  | メジャー(Major)                      |
| 12    | 11 | 10  | B | 8  | デバイスクラス内容                        |
| Đ     | 0  | 0   | Q | ß  | その他                              |
| 0     | 0  | 0   | 0 | 1  | コンピュータ(デスクトップ、ノートブック、PDA、電子手帳など) |
| 0     | 0  | a   | 1 | O. | 電話(携帯電話、コードレス電話、公衆電話、モデムなど)      |
| 0     | 0  | 0 . | 1 | 1  | LAN アクセスポイント                     |
| 0     | 0  | 1   | 0 | 0  | オーディオ(ヘットセット、スピーカ、ステレオなど)        |
| 0     | ۵  | 1   | 0 | 1  | 周辺装置(マウス、ジョイスティック、キーボートなど)       |
| ×     | ×  | ×   | × | ×  | (06~1E:予約)                       |
| 1     | 1  | 1   | 1 | 1  | (特定のデバイスクラスを割り当てない)              |

2: Setting bits

3: Contents of major device class

00000: Other

00001: Computer (e.g. desktop, laptop, PDA, electronic organizer)

00010: Telephone (e.g. mobile phone, cordless phone, public phone,

modem

00011: LAN access point

00100: Audio (e.g. head set, speaker, stereo)

00101: Peripheral device (e.g. mouse, joystick, keyboard)

 $\times \times \times \times \times :$  (06 to 1E: Reservation)

11111: (Specific device class not assigned)

FIG. 9(c)

|       |         |   |  | 7,  |   | <i>i</i> 6  |
|-------|---------|---|--|---|---|---|
| 設定ビット |         |   |  |   |   | )   |
| 7     | 8       | 5   | 4:   | 3   | 2   | デバイスクラス内容   |
| 0     | G       | 0   | ۵  | 0   | 1   | デスクトップワークステーション   |
| 0     | Ð       | 0   | ם  | 1   | 0   | サーバクラスコンピュータ  |
| 0     | Ð       | ٥   | ٥  | 1   | 1   | ラップトップコンピュータ  |
| 0     | 0       | 0   | 1  | 0   | ٥   | ハンドヘルド PC/PDA   |
| 0     | 0       | 0   | 1  | 0   | 1   | パームサイズ PC/PDA   |
| 0     | 0       | 0   | 1  | 1   | 0   | 院時計型ウェアラブル PC   |
| 0     | 0       | 0   | ٥  | ٥   | 1   | 携帯電話  |
| D     | D       | 9   | 0  | 1   | ٥   | コードレス電話   |
| 0     | 0       | 0   | ٥  | 1   | 1   | スマートフォン   |
| 0     | 0       | ם   | 1  | Đ   | 0   | モデム、音声ゲートウェイ  |
| 1:    | :       | :   | :  |   |   | · · · · · · · · · · · · · · · · · · ·                       |
|       | 0 0 0 0 | 7 8<br>0 0<br>0 0<br>0 0<br>0 0<br>0 0<br>0 0<br>0 0<br>0 0 | 7 8 5<br>0 0 0<br>0 0 0<br>0 0 0<br>0 0 0<br>0 0 0<br>0 0 0<br>0 0 0 | 7 8 5 4 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 | 7 8 5 4 3 0 0 0 0 0 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 | 7 8 5 4 3 2 0 0 0 0 0 1 0 0 0 0 1 1 0 0 0 0 1 1 0 0 0 1 0 1 |

4: Major device class

4a: Computer

4b: Telephone

5: Setting bits

6: Contents of minor device class

000001: Desktop workstation

000010: Server class computer

000011: Laptop computer

000100: Hand-held PC/PDA

000101: Palm-size PC/PDA

000110: Wristwatch-type wearable PC

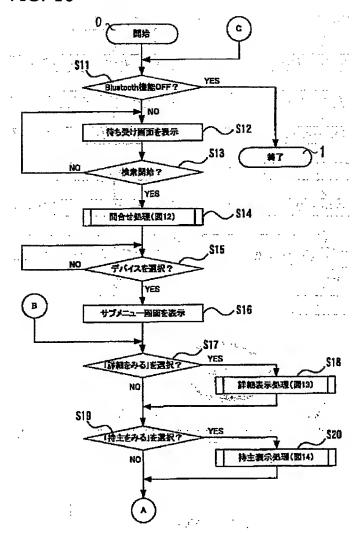
000001: Mobile phone

000010: Cordless phone

000011: Smartphone

000100: Modem, audio gateway

FIG. 10



0: Start

S11: Bluetooth function off?

S12: Display standby screen

S13: Start search?

S14: Inquiry (FIG. 12)

S15: Select device?

S16: Display submenu screen

S17: Select "See details"?

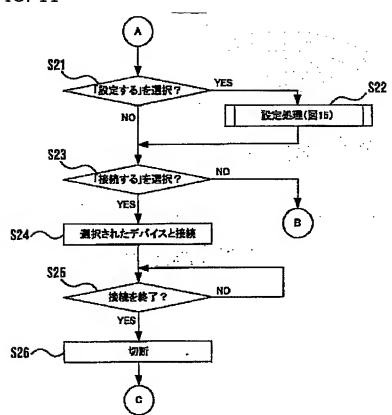
S18: Display details (FIG. 13)

S19: Select "See owner"?

S20: Display owner (FIG. 14)

1: End

FIG. 11



S21: Select "Make settings"?

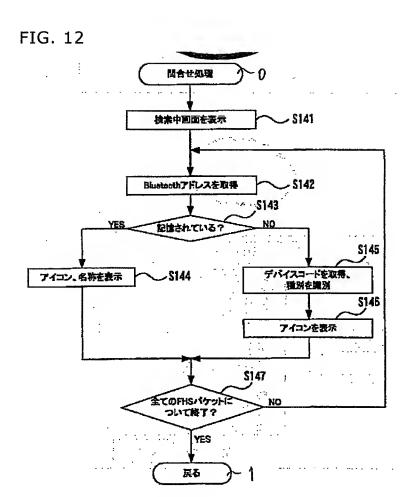
S22: Make settings (FIG. 15)

S23: Select "Connect"?

S24: Connect to selected device

S25: Terminate connection?

S26: Disconnect



0: Inquiry process

S141: Display search-in-progress screen

S142: Obtain Bluetooth address

S143: Stored?

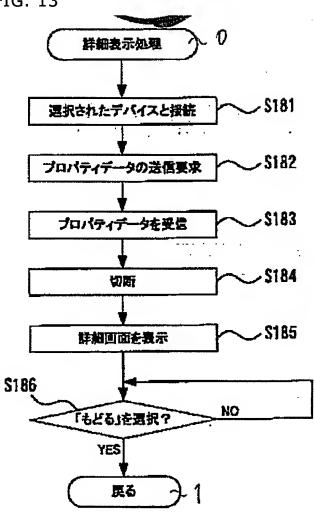
S144: Display icon and name

S145: Obtain device code and identify type

S146: Display icon

S147: Finished for all FHS packets?

FIG. 13



0: Process of displaying details

S181: Connect to selected device

S182: Request transmission of property data

S183: Receive property data

S184: Disconnect

S185: Display details screen

S186: Select "Return"?

FIG. 14 持主表示処理 S201 選択されたデバイスと接続 \$202 持主データの送信要求 S203 持主データを受信 **S204** 切断 \$205 持主直面を表示 **S206** NO 「もどる」を選択? YES 戻る

0: Process of displaying owner

S201: Connect to selected device

S202: Request transmission of owner data

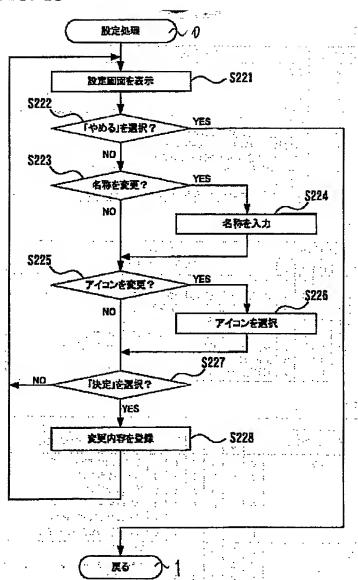
S203: Receive owner data

S204: Disconnect

S205: Display owner screen

S206: Select "Return"?

FIG. 15



0: Process of making settings

S221: Display settings screen

S222: Select "Quit"?

S223: Change name?

S224: Enter name

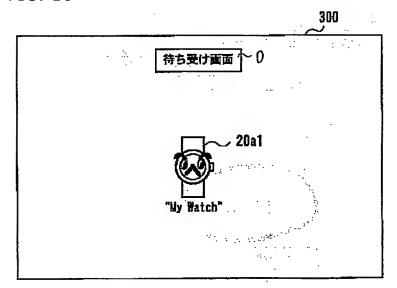
S225: Change icon?

S226: Select icon

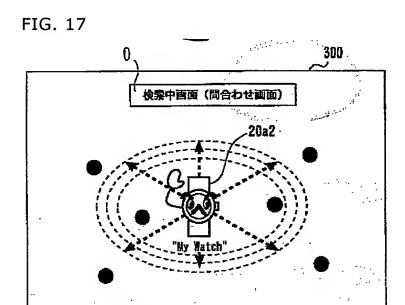
S227: Select "Enter"?

S228: Register changed items

FIG. 16

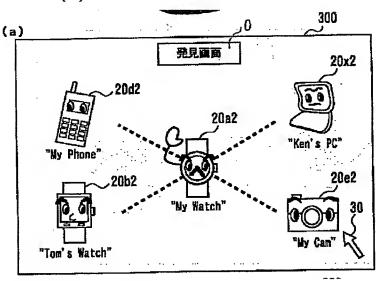


0: Standby screen



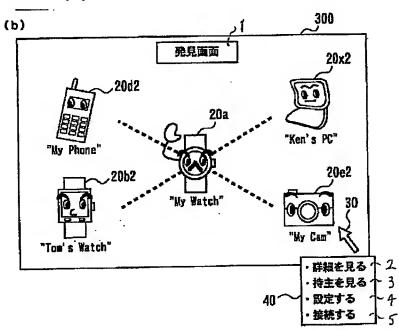
0: Search-in-progress screen (Inquiry screen)

FIG. 18(a)



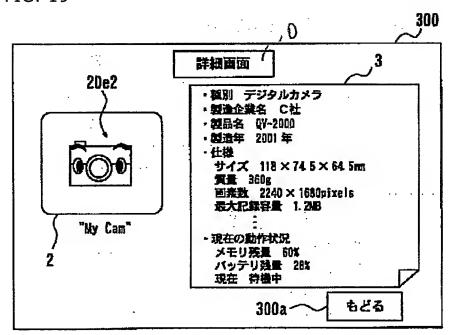
## 0: Discovery screen

FIG. 18(b)



- 1: Discovery screen
- 2: See details
- 3: See owner
- 4: Make settings
- 5: Connect

FIG. 19



0: Details screen

300a: Return

Box 3 (from the top):

Type Digital camera

Manufacturing company Company C

Product name

Year of Manufacture

Year 2001

Specification

Size

Weight

**Pixels** 

Maximum memory capacity

Current operation status

Remaining memory space

Remaining battery

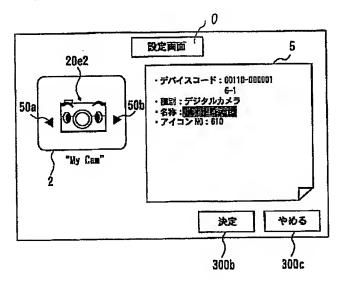
Current status standby

0: Owner screen

1: Mr. ○○ is owner

300a: Return

FIG. 21



0: Settings screen

Box 5 (from the top):

Device code

Type: Digital camera

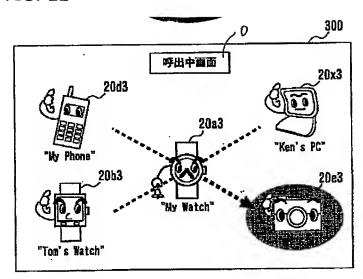
Name

Icon

300b: Enter

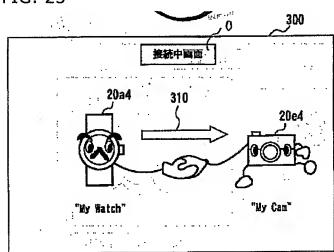
300c: Quit

FIG. 22



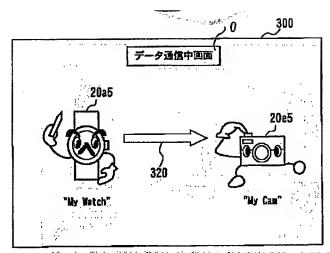
0: Call-in-progress screen

FIG. 23



0: Connection-in-progress screen

FIG. 24



0: Data transmission-in-progress screen